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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,003	02/14/2002	Paul F. Baude	57181US002	9203

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EXAMINER	
TRINH, HOA B	

ART UNIT	PAPER NUMBER
2814	

DATE MAILED: 06/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/076,003	BAUDE ET AL.	
	Examiner	Art Unit	
	Vikki H. Trinh	2814	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 March 2005* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40* is/are pending in the application.

4a) Of the above claim(s) *1-19 and 34-38* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *20-33,39 and 40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 20-22, 25-33,and 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tang in view of Sturm et al. (6,087,196).

Tang discloses an integrated circuit having a deposition substrate 20, a patterned first electrode layer 62 adjacent the substrate; a patterned organic semiconductor layer (col. 4, line 14, col. 7, lines 2, 26) ; and a second patterned electrode layer 72, wherein the patterned layer is defined by repositionable aperture mask 112 and the first electrode and the organic layer are vapor deposited (col. 4, line 50). See figure 1. Note that the substrate is a deposition substrate and the electrodes are patterned.

However, Tang doe not explicitly teach that one of the first electrode layer and the second electrode layer defines S/D electrodes and that one of the first electrode layer and the second electrode layer defines a gate electrode.

Sturm et al. discloses a TFT having a patterned first electrode 62 and a patterned second electrode, wherein a first electrode layer 62 defines a gate electrode and the second electrode layer 72, 90 defines S/D electrodes of the TFT. See figure 1.

Therefore, as to claim 20 and 39-40, it would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Tang with the first and second electrodes defining S/D electrodes and a gate electrode, as taught by Sturm et al., so as to provide a transistor.

As to claim 22, Sturm et al. teaches that the first electrode 124, 126 defines the S/D electrodes and the second electrode layer 118 defines a gate electrode. See figures 14B.

As to claim 25, Sturm et al. that the organic semiconductor is a polycrystalline organic semiconductor. See column 6, lines 50-68.

As to claim 26, Sturm et al. that the material is pentacene. See column 6, lines 50-65.

As to .claim 27, Sturm et al. that one or more complimentary transistor circuit elements 108, 110, 112. See figures 13C.

As to claim 28, Sturm et al. that the elements include a semiconductor layer 102, 104, 106, having amorphous semiconductor layer. See column 6, lines 40-50.

As to claims 29-31, Sturm et al. that one or more layers 62, 72 includes one or more interconnects. Fig. 1.

As to clam 32, Sturm et al. that a patterned dielectric layer 52, 128 (col. 8, lines 23-25) formed adjacent to the organic layer 123. See figure 1.

As to claim 33, Sturm et al. that the IC is an electronic display. See column 1, lines 21-25.

7. Claims 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tang (5,937,272).

Tang discloses the invention substantially as claimed. However, Tang does not teach a specific range of gap between the S/D electrodes. Nonetheless, it would have been obvious to one skilled in the art at the time the invention was made to modify the gap between the s/d electrodes Tang with the specific range, as claimed, since it is prima facie obvious of an artisan's experimentation and optimization because applicant has not established any criticality for the specific range.

Note that the specification contains no disclosure of either the critical nature of the claimed dimensions of any unexpected results arising therefrom. Where patentability is aid to be based upon particular chosen dimensions or upon another variable recited in a claim, the applicant must show that the chosen dimensions are critical. (In re Woodruff, 919 F.2d 1575, 1578 (Fed. Cir. 1990).)

Response to Arguments

5. Applicant's arguments with respect to claims 20-33, and 39-40 filed on 03/14/05, have been considered but they are not persuasive.

In the remarks, Applicant argued the rejection of claims 20 and 39-40 under 35 U.S.C. sec. 102 as being anticipated by Tang is now moot in view of the newly amended claim 20. Tang discloses every element of claim 20, except specifying either the first or the second electrode defining S/D electrode or a gate electrode. Sturm cures the deficiencies in Tang because Sturn discloses an analogous device having a patterned first electrode and a patterned second electrode, wherein a first electrode layer defines a gate electrode and the second electrode layer defines S/D electrodes of the TFT. Moreover, applicant is not correct when applicant states that Tang and Sturm do not teach a multiple IC layers (see above rejection). Therefore, the rejection is proper.

According to claim 23-24, the examiner states that it is prima facie obvious of an artisan's experimentation and optimization to provide a specific range of dimensions because applicant has not established any criticality for the specific range.

For the fore going reasons, the examiner maintains the rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Vikki Trinh whose telephone number is (571) 272-1719. The Examiner can normally be reached from Monday-Friday, 9:00 AM - 5:30 PM Eastern Time. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Mr. Wael Fahmy, can be reached at (571) 272-1705. The office fax number is 703-872-9306.

Any request for information regarding to the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Also, status information for published applications may be obtained from either Private PAIR or Public Pair. In addition, status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. If you have questions pertaining to the Private PAIR system, please contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

Lastly, paper copies of cited U.S. patents and U.S. patent application publications will cease to be mailed to applicants with Office actions as of June 2004. Paper copies of foreign patents and non-patent literature will continue to be included with office actions. These cited U.S. patents and patent application publications are available for download via the Office's PAIR. As an alternate source, all U.S. patents and patent application publications are available

on the USPTO web site (www.uspto.gov), from the Office of Public Records and from commercial sources. Applicants are referred to the Electronic Business Center (EBC) at http://www.uspto.gov/ebc/index.html or 1-866-217-9197 for information on this policy. Requests to restart a period for response due to a missing U.S. patent or patent application publications will not be granted.

Vikki Trinh,
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HOWARD WEISS
PRIMARY EXAMINER